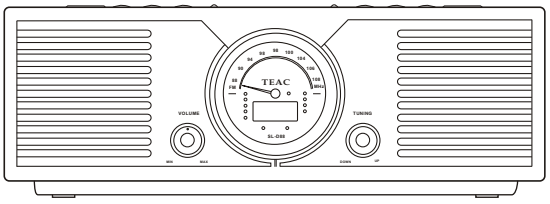


TEAC

SERVICE MANUAL

SL-D88

CD RECEIVER

COMPACT disc DIGITAL AUDIO

NOTES

- PC board shown are viewed from parts side.
- The parts with no reference number or no parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
- ⚠ Parts marked with this sign are safety critical components. they must be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.

CONTENTS

1 SAFETY INFORMATION 2
2 SPECIFICATIONS 3
3 ADJUSTMENT AND CHECKS 4
4 EXPLODED VIEW AND PARTS LIST 6
5 PC BOARDS AND PARTS LISTS 10
6 WIRING DIAGRAM 16
7 INCLUDED ACCESSORIES 17

1 SAFETY INFORMATION

SAFETY INFORMATION

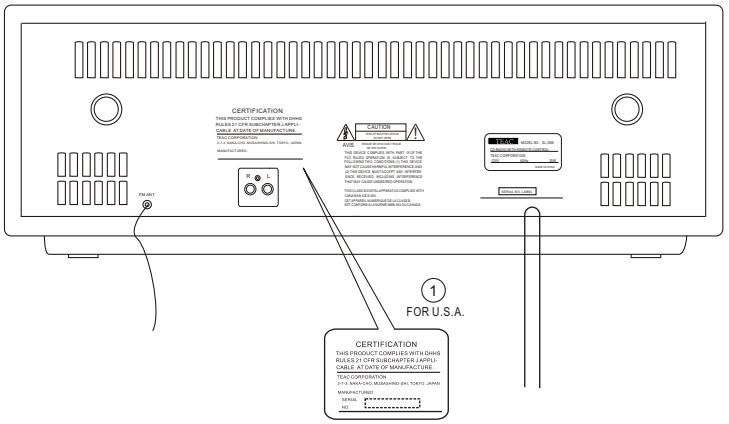
This product has been designed and manufactured according to FDA regulations " title 21, CFR, chapter 1,subchapter J,based on The Radiation Control for Health and Safety Act of 1968" and is classified as class 1 laser product. There is not hazardous invisible laser radiation during operation because invisible laser radiation emitted inside of this product is completely confined in the protective housings. The label required in this regulation is shown ①.

• CAUTION

USE OF CONTROLS OR ADJUSTMENT OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

DO NOT REMOVE THE PROTECTIVE HOUSING USING SCREWDRIVER.

IF THIS PRODUCT DEVELOPS TROUBLE, MAKE A CONTACT WITH OUR SERICEMAN, AND DO NOT USE THE PRODUCT A TROUBLED STATE.



Optical pickup:	Type :	SF-P101N
	Manufacturer :	SANYO Electric Co., Ltd.
	Laser output :	Less than 0.5 mW on the objective lens
	Wavelength :	765 - 815 nm

2 SPECIFICATIONS

TUNER Section

Frequency Range (FM):	87.5MHz to 108.00 Mhz
Frequency Range (AM):	520kHz to 1710 kHz

CD PLAYER Section

Frequency Response:	20 Hz to 20 kHz (+/- 1dB)
Wow and Flutter:	Unmeasurable

SPEAKER SYSTEM Section

Type:	65 mm x 2
Impedance:	4 ohms

GENERAL

Power Requirements:	120V AC,60Hz
Power Consumption:	25 W
Total Output Power :	3 W + 3 W
Dimension (W x H x D):	361 x 129 x 251 mm
Weight:	3.6 kg
Standard Accessories:	Owner's Manual x 1 Warranty Card x 1

- Design and specifications are subject to change without notice.
- Illustrations may differ slightly from production models.

SL-D88

3 ADJUSTMENTS AND CHECKS

3-1 TUNER SECTION

- Use a screwdriver with a plastic or ceramic grip for all adjustment.

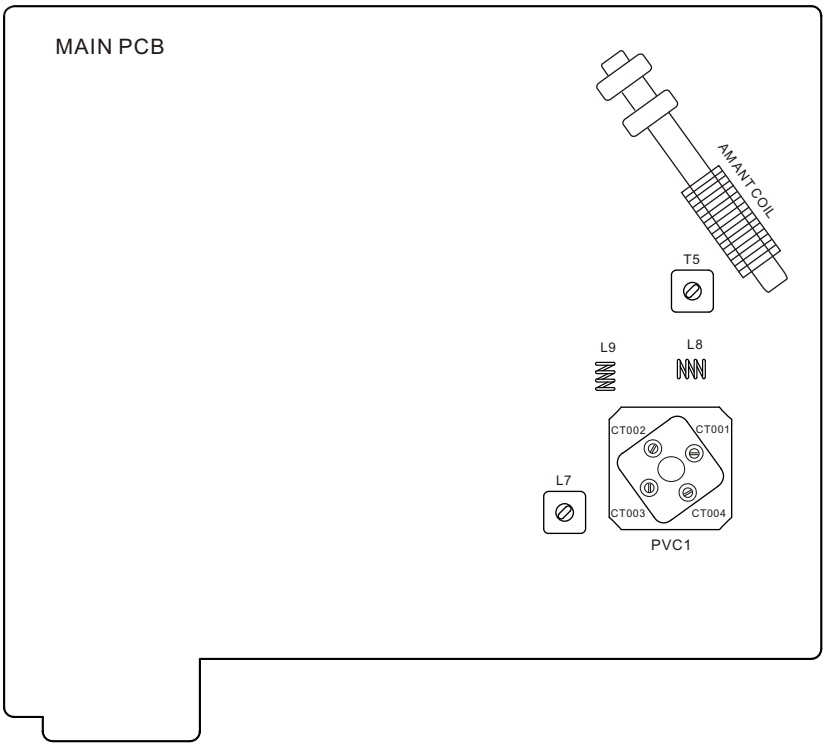
3-1-1 FM adjustment

1. Set the function switch to the FM position.
2. Connect the signal generator output through a 75 ohm dummy antenna to "ANT" on MAIN PCB.
3. Connect the oscilloscope to the speaker terminal.
4. Set the signal generator as listed in the alignment chart.

3-1-2 AM adjustment

1. Set the function switch to the AM position.
2. Connect the test loop antenna across the output of the signal generator.
3. Connect the oscilloscope to the speaker terminal.
4. Set the signal generator as listed in the alignment chart.

3-2 Adjustment and Test Points



3-2-1 FM/AM alignment chart

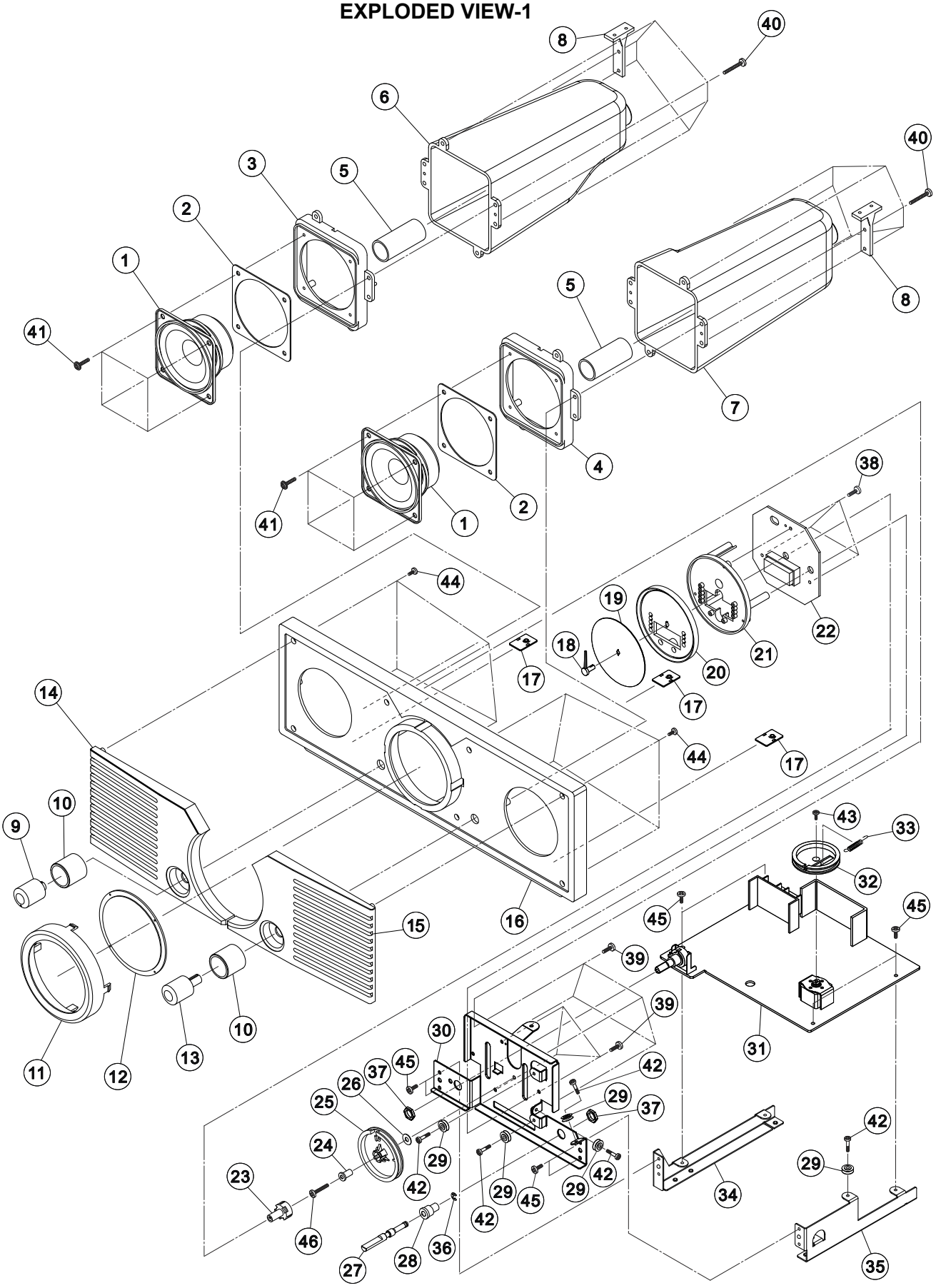
ITEM	SG SETTING	TUNER SETTING	ADJUSTMENT POINT	ADJUSTMENT
FM				
1. FM band	87.5MHz 1kHz, +/-22.5kHz dev.	87.5MHz	L9	Adjust for max.output.
	108MHz 1kHz, +/-22.5kHz dev.	108MHz	PVC CT002	
2. Tracking	90MHz 1kHz, +/-22.5kHz dev.	90MHz	L8	Adjust for max. output and best waveform.
	106MHz 1kHz, +/-22.5kHz dev.	106MHz	PVC CT001	
	Repeat step 2			
AM				
1. IF adjustment	455 kHz 1kHz, 30% mod	1710kHz	T5	Adjust for max.output.
2. AM band	520kHz 1kHz, 30% mod	520kHz	L7	Adjust for max. output.
	1710kHz 1kHz, 30% mod	1710kHz	PVC CT003	
3. Tracking	600kHz 1kHz, 30% mod	600kHz	AM ANT COIL	Adjust for max. output and best waveform.
	1400kHz 1kHz, 30% mod	1400kHz	PVC CT004	
	Repeat step 3			

3-2-2 CD alignment

Auto alignment.

4 EXPLODED VIEW AND PARTS LIST

EXPLODED VIEW-1

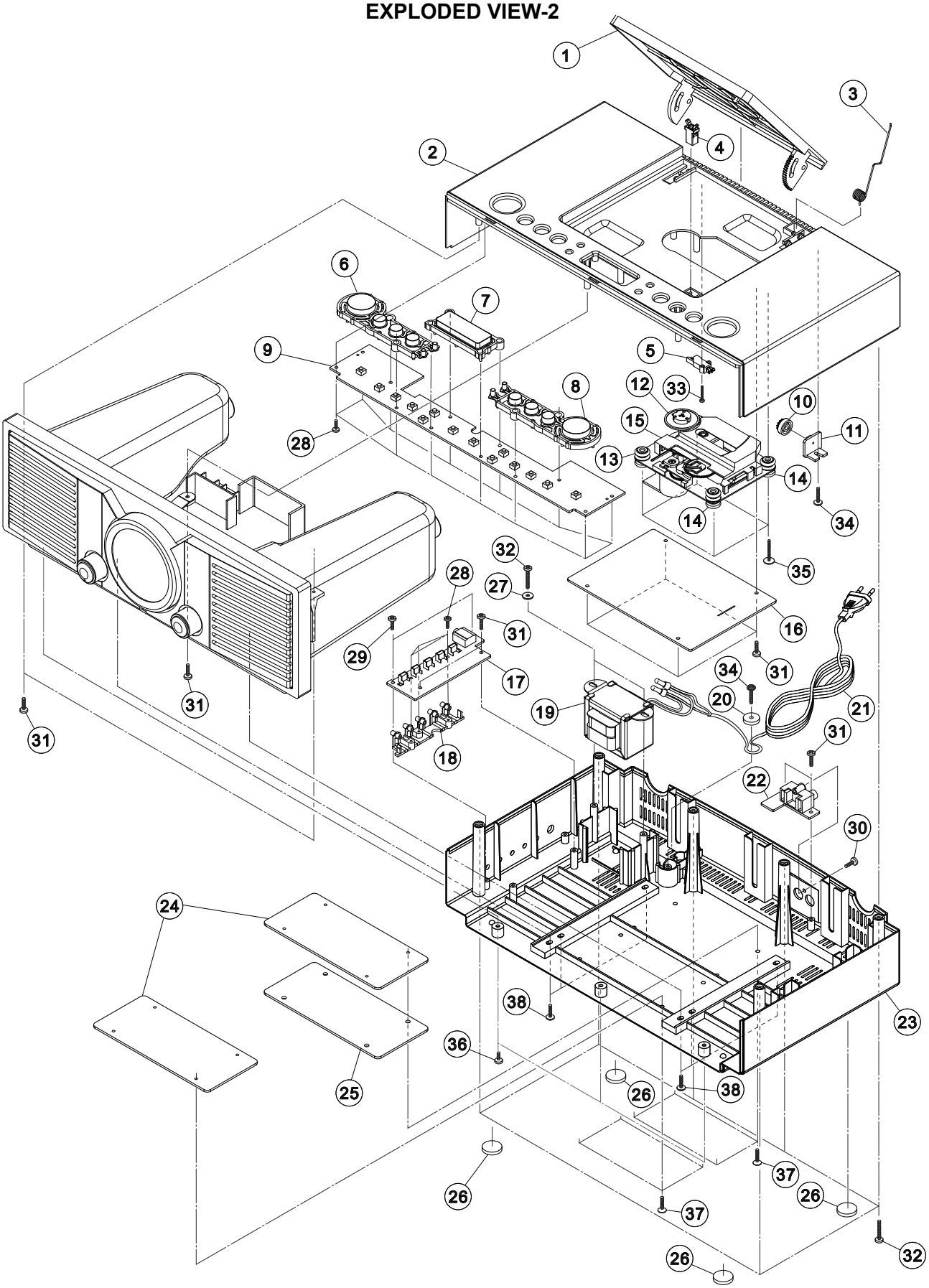


EXPLODED VIEW-1

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
1-1	19-021082800020	SPEAKER 8W 4 OHM	
1-2	58-58SLD8800020	SPEAKER (EVA) 70X70X1MM	
1-3	56-22SLD880B000	SPEAKER COVER/L	
1-4	56-22SLD881B000	SPEAKER COVER/R	
1-5	58-64SLD8800020	PAPER TUBE	
1-6	56-62SLD880B000	SPEAKER TUBE/L	
1-7	56-62SLD881B000	SPEAKER TUBE/R	
1-8	56-07SLD880B000	CONNECT CLIP	
1-9	56-54SLD880B000	VOLUME KNOB	
1-10	61-30SLD8800021	KNOB RING (ALUMINUM)	
1-11	56-78SLD880G000	INTLY RING	
1-12	56-57SLD8800000	DISPLAY LENS	
1-13	56-54SLD881B000	TUNING KNOB	
1-14	61-91SLD8800020	ALUMINUM GRILL - L	
1-15	61-91SLD8810020	ALUMINUM GRILL - R	
1-16	56-04SLD880B000	FRONT CABINET	
1-17	61-61SG50000020	LOCK WASHER	
1-18	56-75SLD880G000	POINTER	
1-19	57-08SLD8800021	POINTER PLATE	
1-20	56-57SLD8819000	BACK LIGHT LENS	
1-21	56-07SLD8819000	LIGHT BRACKET	
1-22	05-04SLD8800000	DISPLAY PCB ASSY	
1-23	56-75SLD881B000	POINTER CONNECT PART	
1-24	61-65SLD8800020	COPPER BUSHING	
1-25	56-25SLD880B000	DIAL DRUM	
1-26	57-08SLD8800120	PVC PLATE DIA 12MM	
1-27	61-65SLD8800120	COPPER SHAFT	
1-28	61-65SLD8800221	COPPER BUSHING SCREW R1	
1-29	56-76SLD880B000	PULLY	
1-30	61-11SLD8800020	METAL BRACKET (1)	
1-31	05-01SLD8800000 05-01SLD8800100	COMPLETE MAIN PCB ASSY	
1-32	56-25SLD881B000	PVC DRUM	
1-33	61-96SLD8800020	STRETCH SPRING	
1-34	61-11SLD8800120	METAL BRACKET (2)	
1-35	61-11SLD8800220	METAL BRACKET (3)	
1-36	68-412300000000	RING (E)	
1-37	67-021900000020	NUT M9X0.75	
1-38	66-140230180321	SCREW TA/BH 3X8MM	
1-39	66-140230210321	SCREW TA/BH 3X10MM	
1-40	66-140230216321	SCREW TA/BH 3X16MM	
1-41	66-140830210321	SCREW TA/WH 3X10MM	
1-42	66-110330212321	SCREW MC/PH 3X12(5+7)MM	
1-43	66-120226150321	SCREW MS/BH 2.6X5MM	
1-44	66-120226160321	SCREW MS/BH 2.6X6MM	
1-45	66-120230160121	SCREW MS/BH 3X6MM (BLACK)	
1-46	66-120230214321	SCREW MS/BH 3X14MM	

SL-D88

EXPLODED VIEW-2



EXPLODED VIEW-2

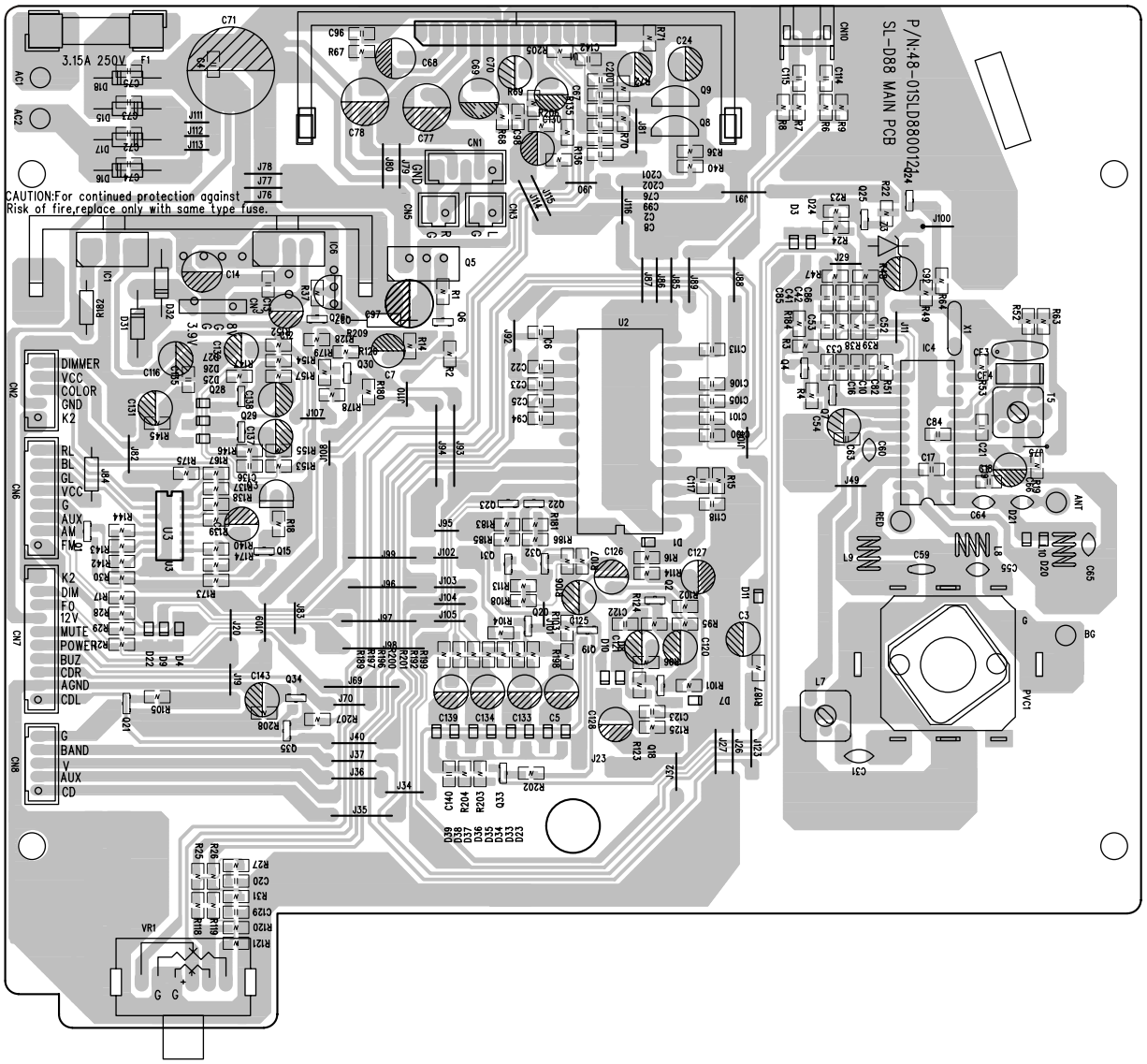
REF. NO		PARTS NO.	DESCRIPTION	REMARKS
2-1		56-14SLD880B010	CD DOOR	
2-2		56-02SLD880B010	TOP CABINET	
2-3		61-97SLD8800021	CD DOOR SPRING	
2-4		41-210240000010	DOOR LOCK	
2-5		41-061120070020	LEAF SWITCH	
2-6		56-54SLD8848010	CD KEY 1	
2-7		56-54SLD8838010	SNOOZE KNOB	
2-8		56-54SLD8858010	CD KEY 2	
2-9		05-05SLD8800000	KEY PCB ASSY	
2-10		56-24SLD880B000	GEAR	
2-11		56-24SLD881B000	GEAR BRACKET	
2-12		20-70DA11000520	CD MECHANISM (SANYO)	
2-13		58-61M520R02120	SHOCK ABSORBER (PINK)	
2-14		58-61M620R00120	SHOCK ABSORBER (BLACK)	
2-15		56-15M520R0B000	LASER COVER	
2-16		05-30SLD8800000 05-30SLD8800100	COMPLETE CD PCB ASSY	
2-17		05-09SLD8800000	H.P JACK PCB ASSY	
2-18		56-54SLD882B000	FUNCTION KNOB	
2-19	⚠	18-203SLD880190	H/TRANSFORMER EI48 - 120V/60Hz	
2-20		56-69SLD880B000	AC CORD PRESS PLATE	
2-21	⚠	45-114180310061	AC CORD CUL APP 6FT	
2-22		05-09SLD8800100	AUX PCB ASSY	
2-23		56-05SLD880B010	BOTTOM CABINET	
2-24		61-11SLD8800320	WEIGHT METAL (1)	
2-25		61-11SLD8800420	WEIGHT METAL (2)	
2-26		58-263172300020	HARD RUBBER FOOT	
2-27		68-112323101000	METAL WASHER 3.2X10X1MM	
2-28		66-140226180321	SCREW TA/BH 2.6X8MM	
2-29		66-140230180321	SCREW TA/BH 3X8MM	
2-30		66-140230210121	SCREW TA/BH 3X10MM (BLACK)	
2-31		66-140230210321	SCREW TA/BH 3X10MM	
2-32		66-140230216321	SCREW TA/BH 3X16MM	
2-33		66-140320212321	SCREW TA/PH 2X12MM	
2-34		66-140830212321	SCREW TA/WH 3X12MM	
2-35		66-151426219221	SCREW TWP/BO 2.6X19 MC	
2-36		66-120230160121	SCREW MS/BH 3X6MM (BLACK)	
2-37		66-120530210121	SCREW MS/KH 3X10MM (BLACK)	
2-38		66-120830210121	SCREW MS/WH 3X10MM (BLACK)	

5 PC BOARDS AND PARTS LIST

MAIN PCB ASSY

REF. NO		PARTS NO.	DESCRIPTION	REMARKS
		05-01SLD8800000]	COMPLETE MAIN PCB ASSY	
		05-01SLD8800100]		
		48-01SLD8800121	MAIN PCB	
C77,78	⚠	26-017100750221	E.CAP 1000UF/16V	
C71	⚠	26-017220850121	E.CAP 2200UF/25V	
CF3		31-028107000120	CER. FILTER LT10.7MA5-A	
CF4		31-026455000120	CER. FILTER KTP455Y	
CN3,5		43-012200120120	WAFER 2MM 2PIN	
CN6		43-012200180120	WAFWE 2MM 8PIN	
CN7		43-012200210120	WAFER 2MM 10PIN	
CN8		43-012200150120	WAFER 2MM 5P	
CN10		43-022200130120	WAFER 2MM 3P	
D1,3,4,7-11, D20-27,33-39		12-PMLL4148L021	SMD DIIODE - PMLL4148L	
D15-18	⚠	12-RL2020000021	RECTIFIER DIODE - RL202	
D31,32	⚠	12-1N4001000021	RECTIFIER DIODE 1N4001	
F1	⚠	46-055310300110	GLASS FUSE 3.15A/250V	
IC1		16-KA7805000021	IC - KA7805	
IC4		16-SA2111000021	IC - SA2111N	
IC6		16-KA7808000021	IC - KA7808	
L6		40-213120215120	AM ANT COIL 120:15T	
L7		40-067050002020	I.F.T - 705 (RED)	
L8,10		40-351450135020	FM COIL 4.5X3.5X0.8MM	
L9		40-351500125020	FM COIL 5X2.5X0.8MM	
PVC1		27-010000130120	PVC T126/4MM (TOMY)	
Q1,2,4,6,15,18,20 Q21,25,27-35		11-MMBT39040121	SMD TR - MMBT3904CT1	
Q3,26		11-8550C0000021	TR - 8550C	
Q5		11-B772Y0000121	TR - B772Y	
Q7,19,22-24		11-MMBT39060021	TR - MMBT3906LT1	
Q8,9		11-9014C0000021	TR - 9014C	
T5		40-06A702004020	I.F.T - A702 (YELLOW)	
U1		16-BA5417000021	IC - BA5417	
U2		16-PT2330000021	IC - PT233	
U3		16-DJ3053000021	IC - DJ3053-1AP	
VR1		22-051615500120	ROTARY VOLUME 50K	
X1		31-038107000020	DISCRIMINATOR FILTER JT10.7	
Z3		12-011390320121	ZENER DIODE 3.9V	

MAIN PCB

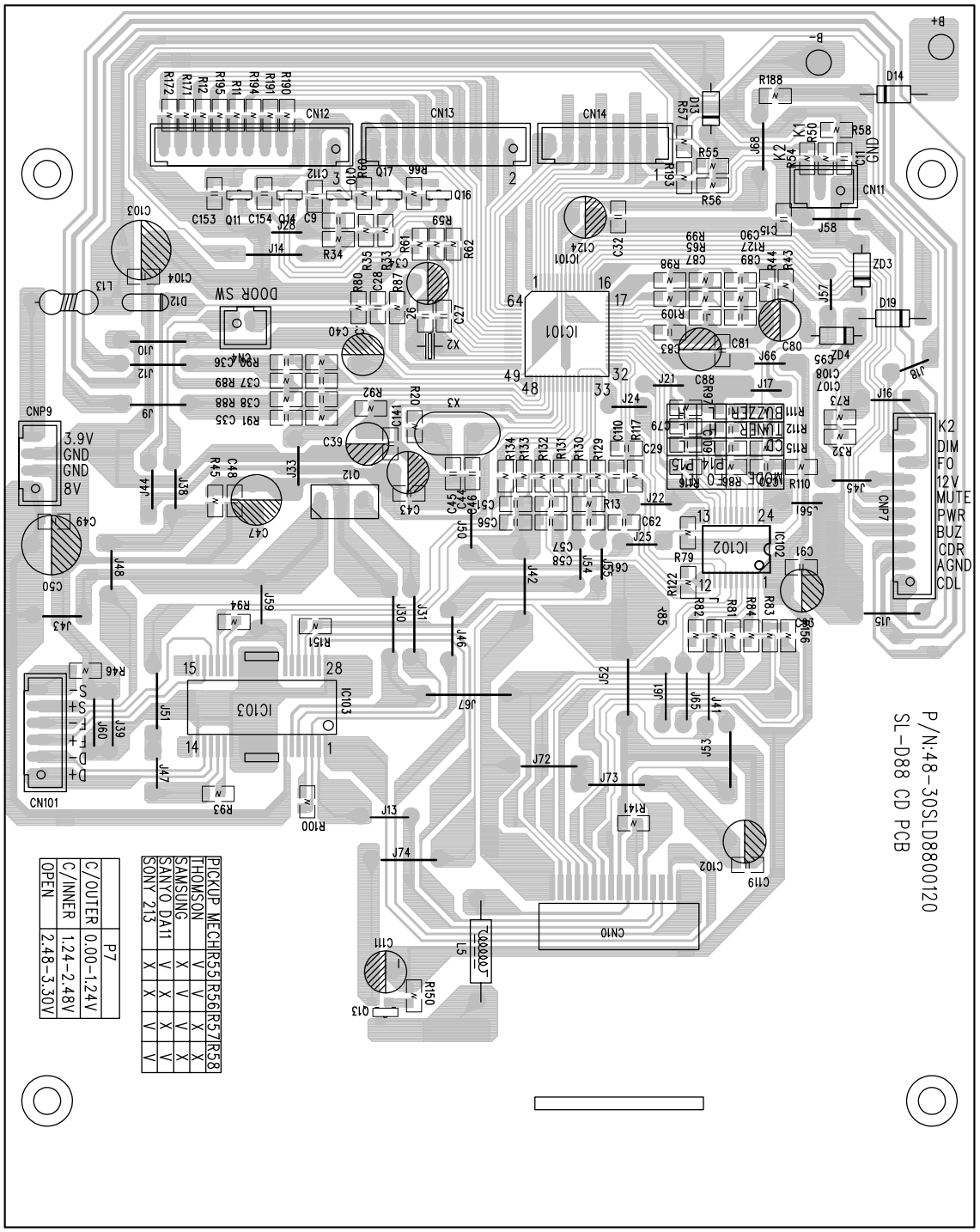

P/N:48-01SLD8800124
SL-D88 MAIN PCB
3.15A 250V
CAUTION:For continued protection against
Risk of fire,replace only with same type fuse.
DIMMER
VCC
COLOR
GND
K2
RL
BL
GL
VCC
G
AUX
AM
FM
K2
DIM
FO
12V
MUTE
POWER
BUZ
CDR
AGND
CDL
G
BAND
V
AUX
CD
VR1
ANT
PVC1

SL-D88

CD PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	05-30SLD8800000 05-30SLD8800100	COMPLETE CD PCB ASSY	
	48-30SLD8800120	CD PCB	
CN4	43-012200120120	WAFER 2MM 2P	
CN11	43-012200130120	WAFER 2MM 3P	
CN12	43-022200211120	WAFER 2MM 11P	
CN13	43-022200190120	WAFER 2MM 9P	
CN14	43-022200170120	WAFER 2MM 7P	
CNP9	43-012200140120	WAFER 2MM 4P	
CN101	43-012200160120	WAFER 2MM 6P	
CN102	43-012100216620	SMD F.F.C WAFER 1MM 16P	
D12,13	12-1N60P0000021	DIODE 1N60P	
IC101	16-TC94A58F0021	IC - TC94A58FAG-101	
IC102	16-TA2157FN0021	IC - TA2157FN	
IC103	16-SA1469PH0021	IC - SA1469PH	
L5	38-013100050220	AXIAL INDUCTOR 10UH	
L13	38-014100050120	AXIAL INDUCTOR 100UH	
Q10,11,14,16,17	11-MMBT39040021	SMD TR - MMBT3904CT1	
Q12	11-B772Y0000121	TR - B772Y	
Q13	11-MMBT39060021	TR - MMBT3906LT1	
X2	31-015750000020	CRYSTAL 75KHZ	
X3	31-018169302120	CRYSTAL 16.9344MHZ	
ZD3	12-011330320121	ZENER DIODE 3.3V	
ZD4	12-011560320121	ZENER DIODE 5.6V	

CD PCB



P7	
C/OUTER	0.00-1.24V
C/INNER	1.24-2.48V
OPEN	2.48-3.30V

PICKUP MECH	R55	R56	R57	R58
THOMSON	V	V	X	X
SAMSUNG	X	V	X	X
SANYO DA11	V	X	X	X
SONY 213	X	X	V	V

SL-D88

KEY PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	05-05SLD8800000	KEY PCB ASSY	
	48-05SLD8800220	KEY PCB	
	41-150010030020	TACT SWITCH 6X6MM	

DISPLAY PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	05-04SLD8800000	DISPLAY PCB ASSY	
	48-04SLD880220	DISPLAY PCB	
ALA1,ALA2,PRO, REP, SHUFF,SLE, SNZ	13-011205211020	LED LAMP 2MM (GREEN)	
D2,5,6	13-011203011020	LED LAMP 2MM (ORANGE)	
D29,30	13-011500022020	LED LAMP 5MM	
PM	13-011202011020	LED LAMP 2MM (RED)	
P1	13-04SLD8800020	LED DISPLAY	

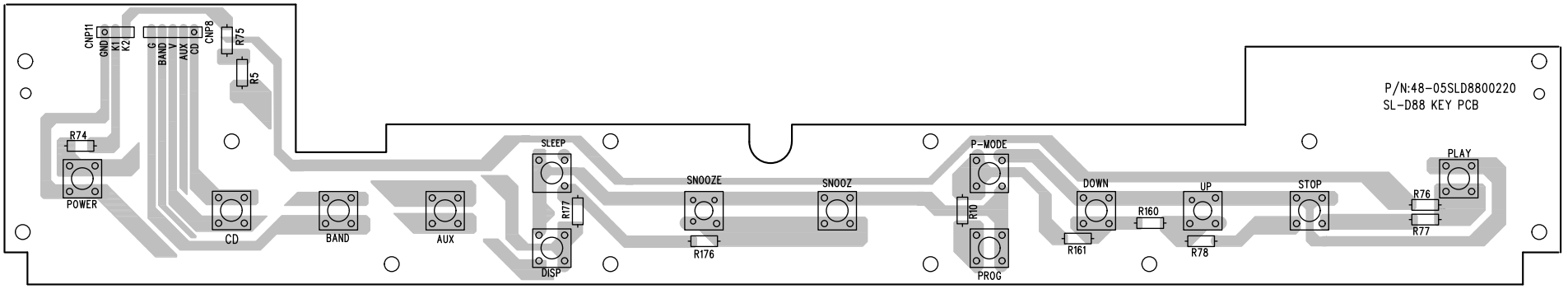
H.P JACK PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	05-09SLD8800000	H.P JACK PCB ASSY	
	48-09SLD8800220	H.P JACK PCB	
AL1,AL2,CLK,COL, DIMMER	41-160040000020	V/TACT SWITCH 7X7.4MM	
CNP1,CNP2	43-022200150120	WAFER 2MM 5P	
JK2	43-431360006020	PH3.6MM JY353507001	
L2,3,4	38-013100050220	AXIAL INDUCTOR 10UH	

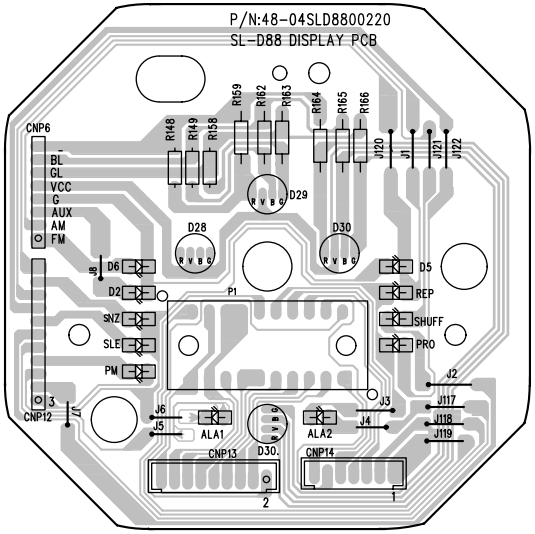
AUX JACK PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	05-09SLD8800100	AUX JACK PCB ASSY	
	48-09SLD8801220	AUX JACK PCB	
JK1	43-451200006120	H/RCA JACK 2P - TC58-34 5-32	
L1,11,12	38-013100050220	AXIAL INDUCTOR 10UH	

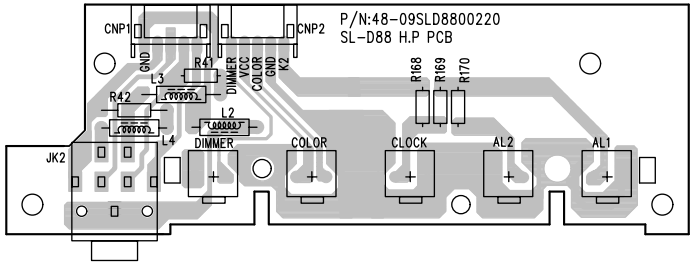
KEY PCB



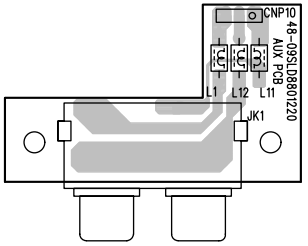
DISPLAY PCB



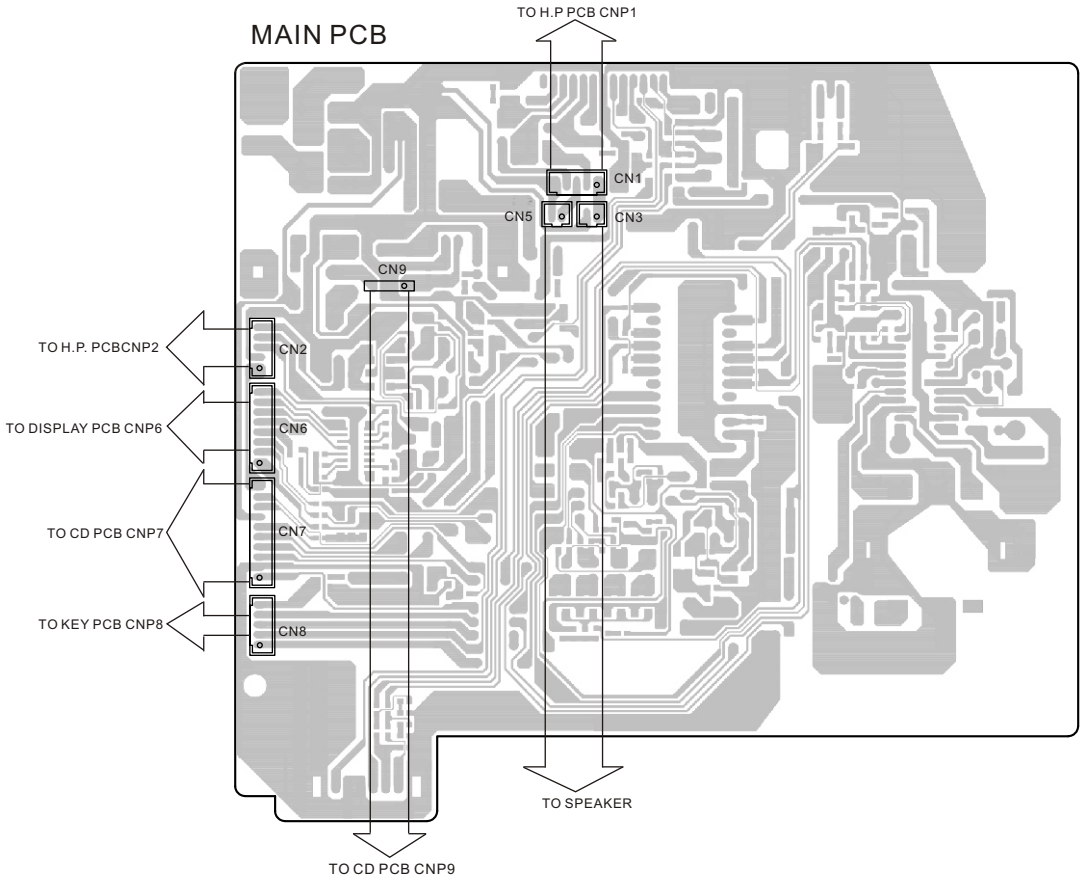
H.P PCB

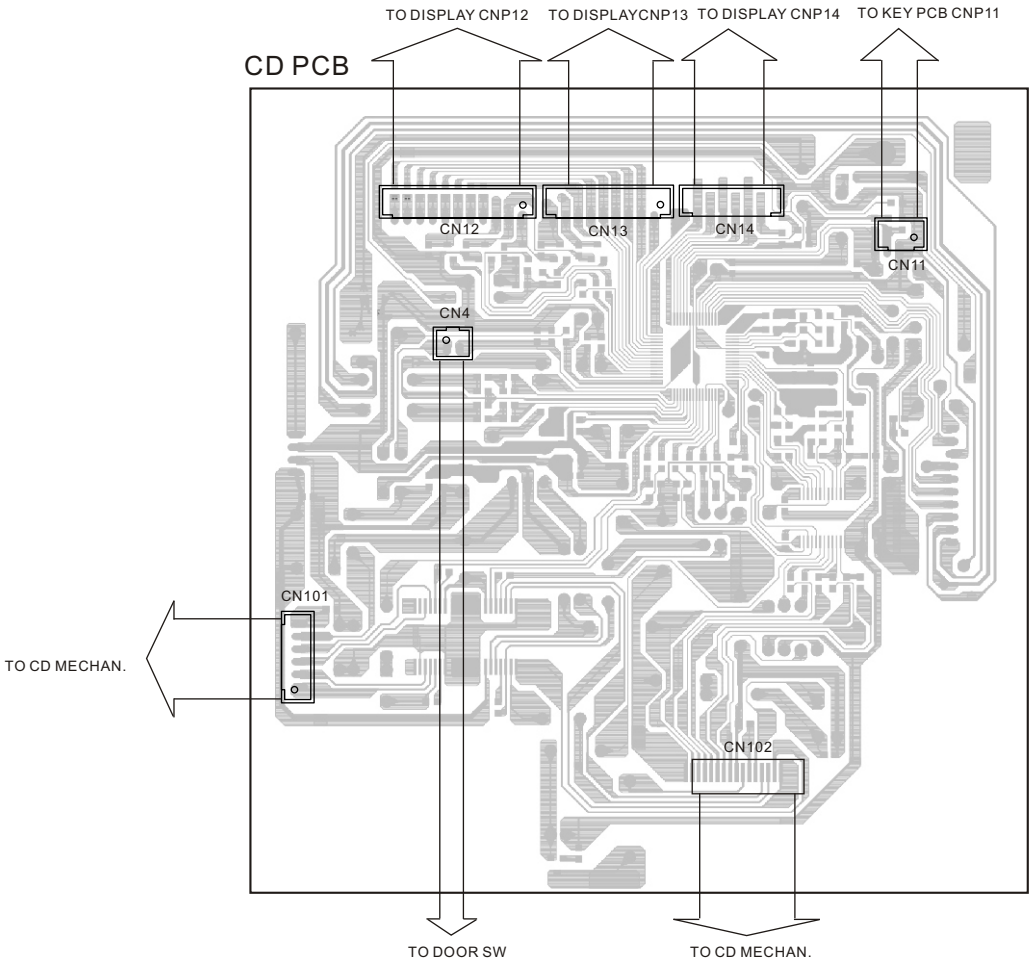


AUX PCB



6 WIRING DIAGRAM





7 INCLUDED ACCESSORIES

INCLUDED ACCESSORIES

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	77-20SLD8800020	INSTRUCTION MANUAL E/F	

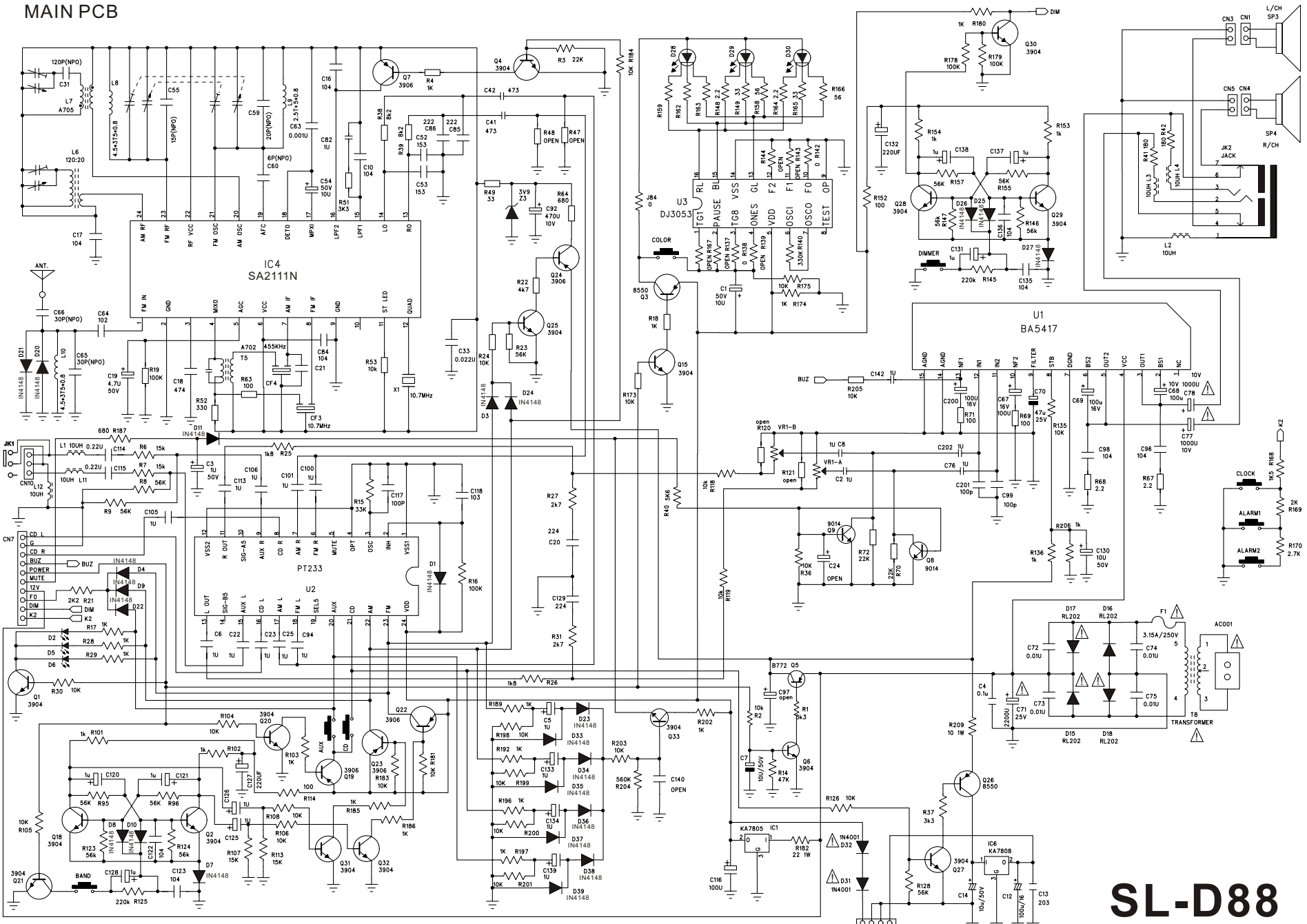
SL-D88

TEAC

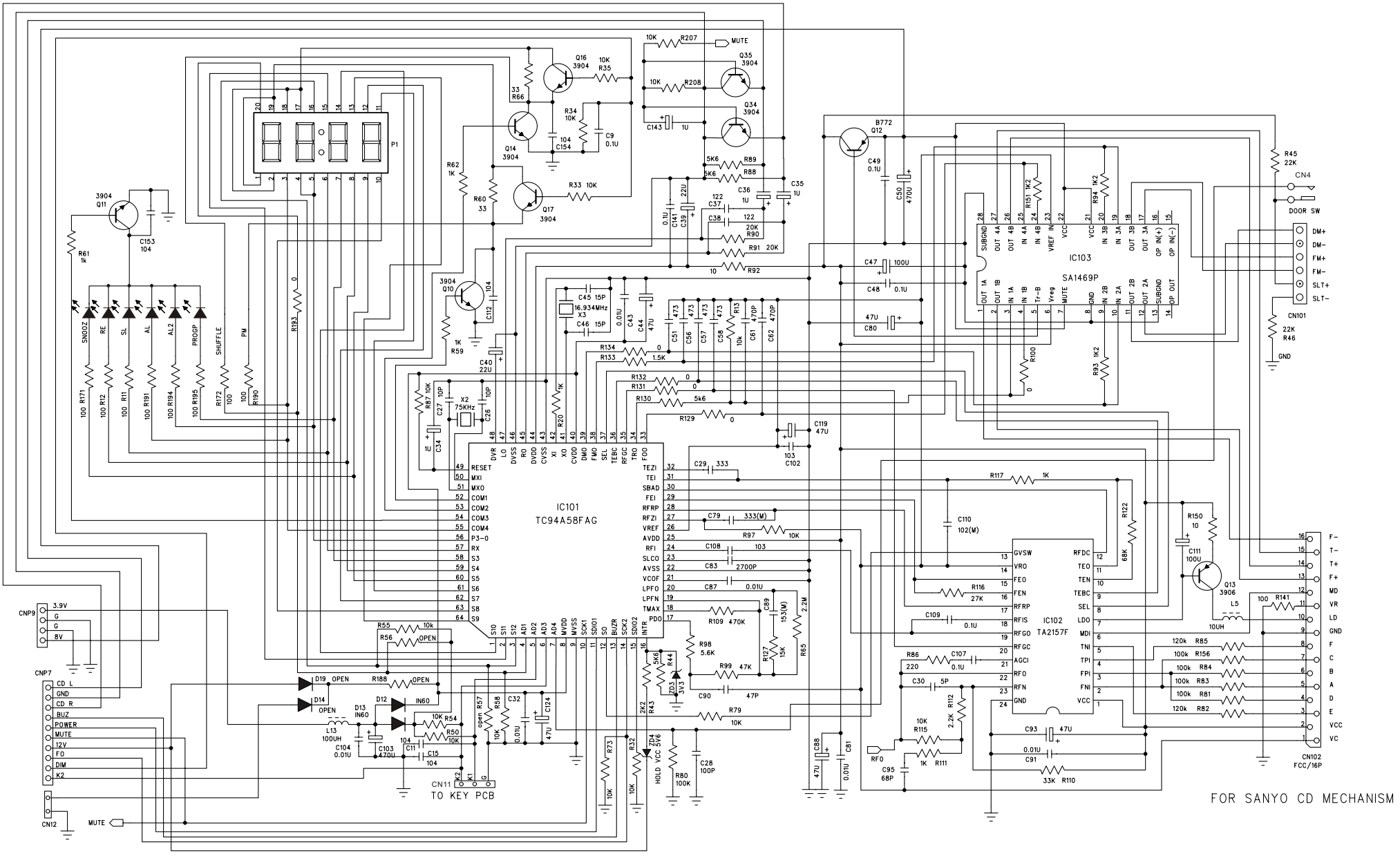
TEAC CORPORATION	3-7-3 Nakacho, Musashino-shi, Tokyo 180-8550, Japan Phone:(0422)52-5081
TEAC AMERICA, INC.	7733 Telegraph Road, Montebello, California 90640 Phone: (323)726-0303
TEAC CANADA LTD.	5939 Wallace Street, Mississauga, Ontario L4Z 1Z8, Canada Phone: (905)-890-8008
TEAC MEXICO, S.A.De C.V.	Campesinos 184,Col. Granjas Esmeraida, 09810, Mexico Phone: (525)-581-5500
TEAC UK LIMITED	5 Marlin House, Croxley Business Park, Watford, Hertfordshire, WD18 8TE, U.K. Phone: 01923-819699
TEAC DEUTSCHLAND GmbH	Bahnstrasse 12, 65205 Wlesbaden-Erbenheim, Germany Phone:0611-71580
TEAC FRANCE S.A.	17, Rue Alexis-de-Tocqueville, CE 005 92182 Antony Cedex, France Phone:(1)42.37.01.02
TEAC NEDERLAND BV	Oeverkruid 15,NL-4941 W Raamsdonksveer, Nederland Phone:0162-510210
TEAC BELGIUM NV/SA.	c/o TEAC NEDERLAND BV, Oeverkruid 15, NL-4941 W Raamsdonksveer, Nederland Phone:+31-162-510860
TEAC ITALIANA S.p.A.	Via C, Cantu 11, 20092 Cinisello Balsamo, Milano, Italy Phone:02-66010550
TEAC AUSTRALIA PTY., LTD. A.B.N. 80 005 408 462	280 William Street, Melbourne VIC 3000, Australia Phone:(03)9672-2400

PREPARED IN HONG KONG

MAIN PCB


IC4
SA2111N
U3
DJ3053
U1
BA5417
PT233
U2
IC1
KA7805
IC6
KA7808
T8
TRANSFORMER
AC001
F1
3.15A/250V
JK2
JACK
SP3
SP4
L/CH
R/CH
ANT.
CLOCK
ALARM1
ALARM2
COLOR
DIMMER
BUZ
DIM
BAND
CD
AUX
SL-D88
CD RECEIVER

CD PCB



pickup mecha	(pin3)	(pin4)
SONY KSS213C	L	L
SANYO DA11	H	L
SAMUSUNG V75	L	H
THOMSON TCP11TK	H	H

MODE	FO (pin14)	F1 (pin15)
CD	L	L
TUNER	H	L
BUZZER	L	H
	H	H

	(PIN7) INNER/ DOOR SW
C/OUTER	0.00~1.24V
C/INNER	1.24~2.48V
OPEN	2.48~3.30V

SL-D88
CD RECEIVER